**Soil Lab Data Mart Updated: Soil Data at Your Fingertips**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Lab Data Mart Update BannerSoil Data at Your Fingertips **[State Name],[City Name] ‒ October 15, 2020 ‒** The [NRCS National Soil Survey Center](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/contact/centers/nssc/?cid=nrcs142p2_053895) recently released geochemical data to the interactive map “[National Cooperative Soil Survey (NCSS) Soil Characterization](https://nrcs.maps.arcgis.com/apps/webappviewer/index.html?id=956154f98fc94edeaa2dbad99bb224af&fbclid=IwAR02FH-eOgfWwGfUtQ0uzTltXwp2cbfGphMHUJlCjQcxKQNPl8lNPY8JZRg).” The map links to a national database of soil characterization data and allows you to locate pedons that have been analyzed. A pedon is the smallest unit of soil containing all the soil horizons of a particular soil type. Clicking on a pedon location in the map enables you to access lab data about that pedon. The map is also available from the NCSS Soil Characterization Basic Query website at <https://ncsslabdatamart.sc.egov.usda.gov/> (click the icon at the bottom left of the page).   |  |  |  | | --- | --- | --- | | [Image link to soil lab data mart](https://ncsslabdatamart.sc.egov.usda.gov/) | [Image link to webmap](https://nrcs.maps.arcgis.com/apps/webappviewer/index.html?id=956154f98fc94edeaa2dbad99bb224af) | [Image link to R and SoilDB Package](https://ncss-tech.github.io/AQP/soilDB/NCSS-interactive-map.html) | | * [Lab Data Mart](https://ncsslabdatamart.sc.egov.usda.gov/) | * [Web Map](https://nrcs.maps.arcgis.com/apps/webappviewer/index.html?id=956154f98fc94edeaa2dbad99bb224af) | * [R and SoilDb package](https://ncss-tech.github.io/AQP/soilDB/NCSS-interactive-map.html) |   “The map gives users nationwide a means to view data that can be used by educators, scientists, farmers, landowners, schools, soil judging teams, the general public and more,” said [State Conservationist Name], [State Name] State Conservationist. “The map lets you search for lab data by using filters or by exploring places you care about across the globe,” explained [State Soil Scientist Name], NRCS [State Name] State Soil Scientist. Interested users can query by location of interest and have soil data available at their fingertips.  [U.S. Map of soil sample locations](https://nrcs.maps.arcgis.com/apps/webappviewer/index.html?id=956154f98fc94edeaa2dbad99bb224af)  The map can assist scientists in developing conservation models for validating outcomes of conservation practices. Users can pinpoint spots using location panels, full-screen maps and latitude and longitude. “Our new interactive map provides online access to our rapidly growing collection of lab data,” explained Skye Wills, National Leader for Soil Science Research.  Soil scientists, hydrogeologists, municipal water-utility operators and water-quality regulators use soils lab data to understand the subsurface. The data viewer includes over 50,000 individual soil samples from across the world.  Soil sample data can also be viewed in reports.   * The map offers options for selecting different base maps and options for adding soil-color maps by depth-slice. * The map offers you to search by location or to go-to your current location. * The map allows you to search by soil series or geographic location. * The map allows you to download characterization data for a selection of points. The data can then be used in other applications.   Following are specific map features. |
| * The map offers two ways to search for lab pedons: Filters and search bar. * The soil map is streamed from Soil Data Access web services, and the popups for each pedon include several lab reports.   + **Examples** * Primary Lab Report: [Click Here](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Furldefense.proofpoint.com%2Fv2%2Furl%3Fu%3Dhttps-3A__ncsslabdatamart.sc.egov.usda.gov_rptExecute.aspx-3Fp-3D1619-26r-3D1-26submit1-3DGet-2BReport%26d%3DDwMFAg%26c%3Dr_tSStIHV2ie60z4DgB-pQ%26r%3Dr8Zp-47tGlmSs7dDQdQf1Apb9ymdjJk8ZREMtxzmnuA%26m%3DMasndY8S1o4WZxTjBWwn6iIrOlQk38SNydRU-odfeQ0%26s%3DNHVt-UsROoLLYI0xyevj_c-DoSaLGbOAa1RizSaBs3A%26e%3D&data=02%7C01%7C%7C8fbfbe0fb0584045a45c08d741c74b73%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C0%7C0%7C637050196546594499&sdata=JcQjYftCTIIKXc0crY1R1uUcF7h2IQVrhUdrOXdApA0%3D&reserved=0) * Taxonomy Report: [Click Here](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Furldefense.proofpoint.com%2Fv2%2Furl%3Fu%3Dhttps-3A__ncsslabdatamart.sc.egov.usda.gov_rptExecute.aspx-3Fp-3D1619-26r-3D3-26submit1-3DGet-2BReport%26d%3DDwMFAg%26c%3Dr_tSStIHV2ie60z4DgB-pQ%26r%3Dr8Zp-47tGlmSs7dDQdQf1Apb9ymdjJk8ZREMtxzmnuA%26m%3DMasndY8S1o4WZxTjBWwn6iIrOlQk38SNydRU-odfeQ0%26s%3DpX0nMKOpFy6rP4PHo-EFRTEiBi6cCQEaXiwinqWpnbY%26e%3D&data=02%7C01%7C%7C8fbfbe0fb0584045a45c08d741c74b73%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C0%7C0%7C637050196546604490&sdata=O86VRTpEyiD47cTsvFsGygItHIwqbrininxT0ATOQgk%3D&reserved=0) * Supplementary Lab Report: [Click Here](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Furldefense.proofpoint.com%2Fv2%2Furl%3Fu%3Dhttps-3A__ncsslabdatamart.sc.egov.usda.gov_rptExecute.aspx-3Fp-3D1619-26r-3D2-26submit1-3DGet-2BReport%26d%3DDwMFAg%26c%3Dr_tSStIHV2ie60z4DgB-pQ%26r%3Dr8Zp-47tGlmSs7dDQdQf1Apb9ymdjJk8ZREMtxzmnuA%26m%3DMasndY8S1o4WZxTjBWwn6iIrOlQk38SNydRU-odfeQ0%26s%3DounyhwhQTwMBhV-GegRdCI8noYsnN6O4w_Rn4Ab04UQ%26e%3D&data=02%7C01%7C%7C8fbfbe0fb0584045a45c08d741c74b73%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C0%7C0%7C637050196546604490&sdata=hLSc32Vnw0KN4Oe3MJYGUDaiAaeAi0qMJ2zX79ncXE4%3D&reserved=0) * Water Retention Report: [Click Here](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Furldefense.proofpoint.com%2Fv2%2Furl%3Fu%3Dhttps-3A__ncsslabdatamart.sc.egov.usda.gov_rptExecute.aspx-3Fp-3D1619-26r-3D6-26submit1-3DGet-2BReport%26d%3DDwMFAg%26c%3Dr_tSStIHV2ie60z4DgB-pQ%26r%3Dr8Zp-47tGlmSs7dDQdQf1Apb9ymdjJk8ZREMtxzmnuA%26m%3DMasndY8S1o4WZxTjBWwn6iIrOlQk38SNydRU-odfeQ0%26s%3DzKaYgHwb469eIA3_leNJk3W-ZzkomrwsdS2O0ld0PYA%26e%3D&data=02%7C01%7C%7C8fbfbe0fb0584045a45c08d741c74b73%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C0%7C0%7C637050196546614482&sdata=eX0%2BfW%2B1W4ZT5rlB%2BRrFiobx0PkH2uhcrp93QZAn7mY%3D&reserved=0) * Correlation Report: [Click Here](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Furldefense.proofpoint.com%2Fv2%2Furl%3Fu%3Dhttps-3A__ncsslabdatamart.sc.egov.usda.gov_rptExecute.aspx-3Fp-3D1619-26r-3D7-26submit1-3DGet-2BReport%26d%3DDwMFAg%26c%3Dr_tSStIHV2ie60z4DgB-pQ%26r%3Dr8Zp-47tGlmSs7dDQdQf1Apb9ymdjJk8ZREMtxzmnuA%26m%3DMasndY8S1o4WZxTjBWwn6iIrOlQk38SNydRU-odfeQ0%26s%3DLcEKuJNgKUORTR8Z2V1UvRzBSYM_36_eVaGgBDoV3FQ%26e%3D&data=02%7C01%7C%7C8fbfbe0fb0584045a45c08d741c74b73%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C0%7C0%7C637050196546624481&sdata=fAAGzx2hrbxpMr9V1kA39454JzL8mNoUKeb9KlIA4Bg%3D&reserved=0) * Pedon Description Report: [Click Here](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Furldefense.proofpoint.com%2Fv2%2Furl%3Fu%3Dhttps-3A__nasis.sc.egov.usda.gov_NasisReportsWebSite_limsreport.aspx-3Freport-5Fname-3DPedon-5FSite-5FDescription-5Fusepedonid-26pedon-5Fid-3D74WI055003%26d%3DDwMFAg%26c%3Dr_tSStIHV2ie60z4DgB-pQ%26r%3Dr8Zp-47tGlmSs7dDQdQf1Apb9ymdjJk8ZREMtxzmnuA%26m%3DMasndY8S1o4WZxTjBWwn6iIrOlQk38SNydRU-odfeQ0%26s%3D6iR6jUnPovMUFS6RgUPksSGgqpplk1f0h3GcDRQmUy8%26e%3D&data=02%7C01%7C%7C8fbfbe0fb0584045a45c08d741c74b73%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C0%7C0%7C637050196546624481&sdata=nZG3jpiAYSeL8DG4ekL1BeqOB60zkvrDkRghsQ5g2Ps%3D&reserved=0) * Soil Profile: [Click Here](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Furldefense.proofpoint.com%2Fv2%2Furl%3Fu%3Dhttps-3A__nasis.sc.egov.usda.gov_NasisReportsWebSite_limsreport.aspx-3Freport-5Fname-3DWEB-2Dprofiles-2Dby-2DPEIID-26pedon-5Fpeiid-3D127994%26d%3DDwMFAg%26c%3Dr_tSStIHV2ie60z4DgB-pQ%26r%3Dr8Zp-47tGlmSs7dDQdQf1Apb9ymdjJk8ZREMtxzmnuA%26m%3DMasndY8S1o4WZxTjBWwn6iIrOlQk38SNydRU-odfeQ0%26s%3DXRgBMg7Nz6DFj9Pt4Hn3_aQJg9vzuC9khoxchUl62k8%26e%3D&data=02%7C01%7C%7C8fbfbe0fb0584045a45c08d741c74b73%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C0%7C0%7C637050196546634478&sdata=Z1CRH9psSvwu3jxsNOiC8FMeNPDUfV%2FGlfz6D84tEYg%3D&reserved=0) |
| image of filter to search You can use the search bar to search by location or soil series. You can also use the filter icon, which is at the bottom of the map. |
| image of  filter by soil series  You can use the filter to search by soil series or soil classification. You can also create your own queries by clicking the icon in the lower right corner of the filter menu. |
| image of map also lets you filter by soil series or soil classification  The image above shows soils filtered by the soil classification “Paleustolls.” |
| image shows soils filtered by soil classification To filter by soil series or soil classification, type in the soil series name or part of a soil classification and turn the filter switch to on (green). |
| Image of hand held information To learn more about soils or to get assistance, [click here](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951) to contact your State Soil Scientist. |
| Helping People Help the Land  USDA is an equal opportunity provider, employer and lender. |